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Yamamoto

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(54) **CRYSTALLINE TURBOSTRATIC BORON NITRIDE POWDER AND METHOD FOR PRODUCING SAME**

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(51) **Int. Cl.**[7] **C01B 21/064**
(52) **U.S. Cl.** **423/290**; 428/403
(58) **Field of Search** 423/290

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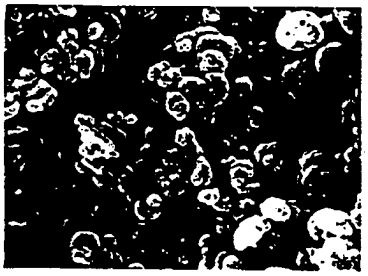
(57) **ABSTRACT**

Turbostratic boron nitride (t-BN) powder having excellent sinterability. A mixture of boric acid anhydride and urea is charged in a reaction vessel together with alkali-borate, heated step by step in the vessel in an nonoxidizing gas atmosphere of one atmospheric pressure or above, and kept at a temperature from 850° C. to 950° C. to yield an intermediate product formal substantially of an amorphous boron nitride powder (first reaction step). Then the intermediate product is heated and kept at a temperature from 1200° C. to 1400° C. to crystallize crystalline t-BN, and the product is purified by washing with water and aqueous solution to obtain pure crystalline t-BN powder.

6 Claims, 8 Drawing Sheets



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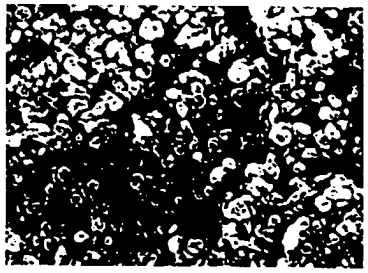

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